




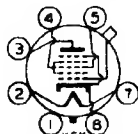
6L7, 6L7-G

6L7-G



PENTAGRID MIXER AMPLIFIER

Heater ■		Coated Unipotential Cathode	
Voltage	6.3	a-c or d-c volts	
Current	0.3	amp.	
	6L7	6L7-G	
Direct Interelectrode Cap.	▲	▲▲	
Grid #1 to Grid #3	0.2 max.	0.2 max.	μuf
Grid #1 to Plate	0.001 max.	0.005 max.	μuf
Grid #3 to Plate	0.1	0.24	μuf
Grid #1 to All other Electrodes	7.5	6	μuf
Grid #3 to All other Electrodes	10	12	μuf
Plate to All other Electrodes	11	10	μuf
Overall Length	3-1/8" max.	{4-7/32" to 4-15/32"	
Maximum Diameter	1-5/16"	1-9/16"	
Bulb	Metal Shell, MT-8	ST-12	
Cap	Miniature	Skirted Min.	
Base	{Small Wafer Octal 7-Pin	{Small Shell Octal 7-Pin	
Basing Designation	7T	G-7T	
Pin 1 {6L7, Shell 6L7-G, No Con.		Pin 5 - Grid #3	
Pin 2 - Heater		Pin 7 - Heater	
Pin 3 - Plate		Pin 8 - Cathode & Grid #5	
Pin 4 - Grids #2 & #4		Cap - Grid #1	
Mounting Position		Any	



BOTTOM VIEW

AMPLIFIER - Class A₁

Plate Voltage	300 max.	volts
Screen Voltage (Grids #2 & #5)	100 max.	volts
Plate Dissipation	1.5 max.	watts
Screen Dissipation	1.0 max.	watt
Typical Operation:		
Plate	250	volts
Screen	100	volts
Control Grid (Grid #1)	-3	volts
Control Grid (Grid #3)	-3	volts
Plate Res. (approx.)	0.6	megohm
Transcond., Grid #1 to Plate	1100	μmhos
Transcond., Grid #1 to Plate*	5 approx.	μmhos
Plate Cur.	5.3	ma.
Screen Cur.	6.5	ma.

MIXER

Plate Voltage	300 max.	volts
Screen Voltage (Grids #2 & #4)	150 max.	volts
Plate Dissipation	1.0 max.	watt
Screen Dissipation	1.5 max.	watts

- In circuits where the cathode is not connected directly to the heater, the potential difference between heater and cathode should be kept as low as possible.
- ▲ With shell connected to cathode.
- ▲▲ With close-fitting shield connected to cathode.
- * With grid #1 bias of -15 volts, and grid #3 bias of -15 volts.

FEB. 2, 1940

RCA RADOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

DATA

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6L7-G



6L7, 6L7-G

PENTAGRID MIXER AMPLIFIER

(continued from preceding page)

Typical Operation:

Plate	250	250*	volts
Screen	100	150*	volts
Signal-Grid (Grid #1)	-3 min.	-6* min.	volts
Oscillator Grid (Grid #3) **	-10	-15	volts
Peak Osc.-Grid Voltage Applied to Grid #3	12 min.	18 min.	volts
Plate Res.	Greater than 1		megohm
Conversion Transcond.	375	350	μ hos
Conversion Transcond.	5●	5 Δ	μ hos
Plate Cur.	2.4	3.3	ma.
Screen Cur.	7.1	9.2	ma.

** The d-c resistance in grid #3 circuit should not exceed 50000 ohms.

● With grid #1 bias of -30 volts. Δ With grid #1 bias of -45 volts.

* These conditions are recommended for multi-range receiver applications.

FEB. 2, 1940

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DATA

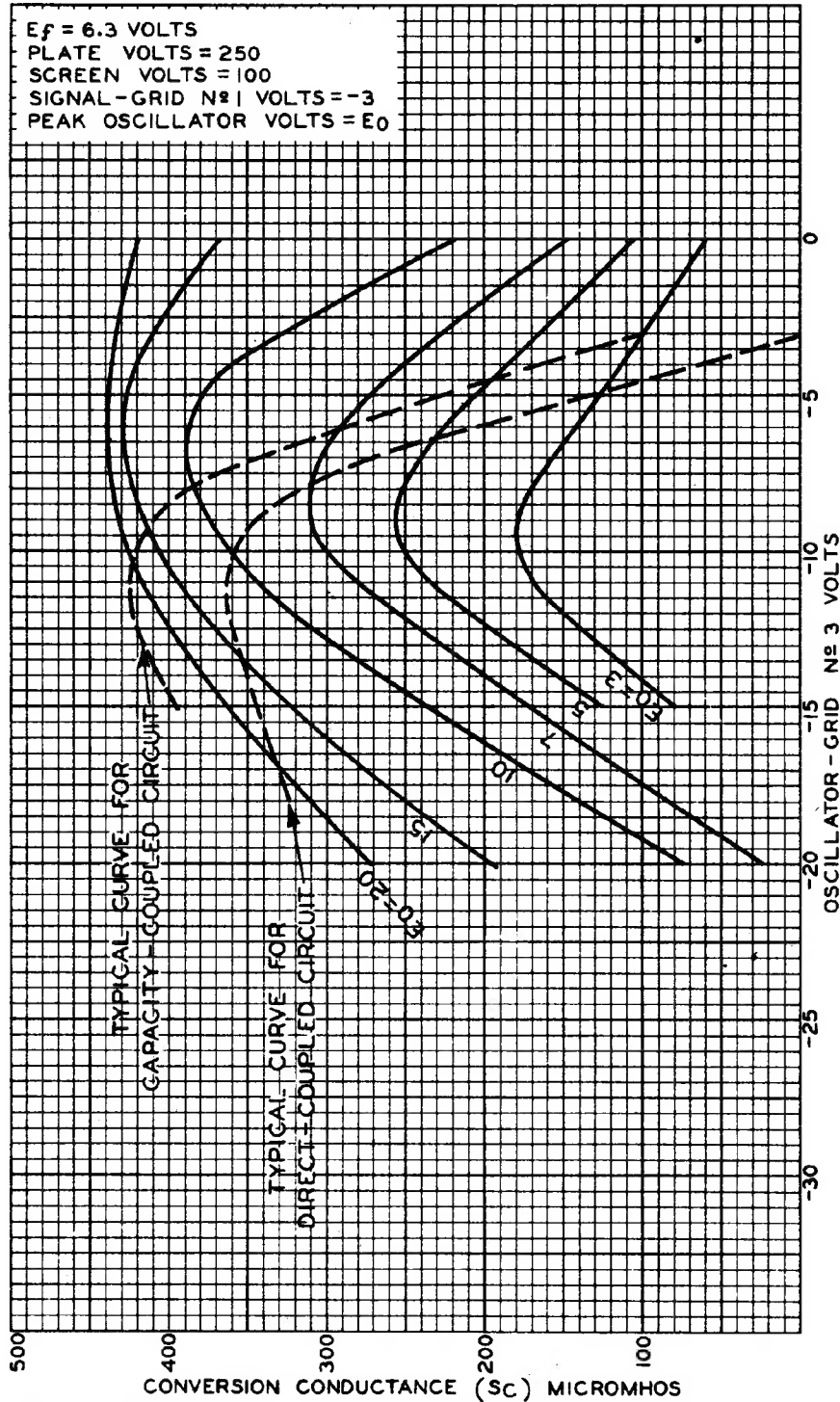


RCA-6L7

6L7

OPERATION CHARACTERISTICS

$E_f = 6.3$ VOLTS
PLATE VOLTS = 250
SCREEN VOLTS = 100
SIGNAL-GRID N°1 VOLTS = -3
PEAK OSCILLATOR VOLTS = E_0



JULY 30, 1935

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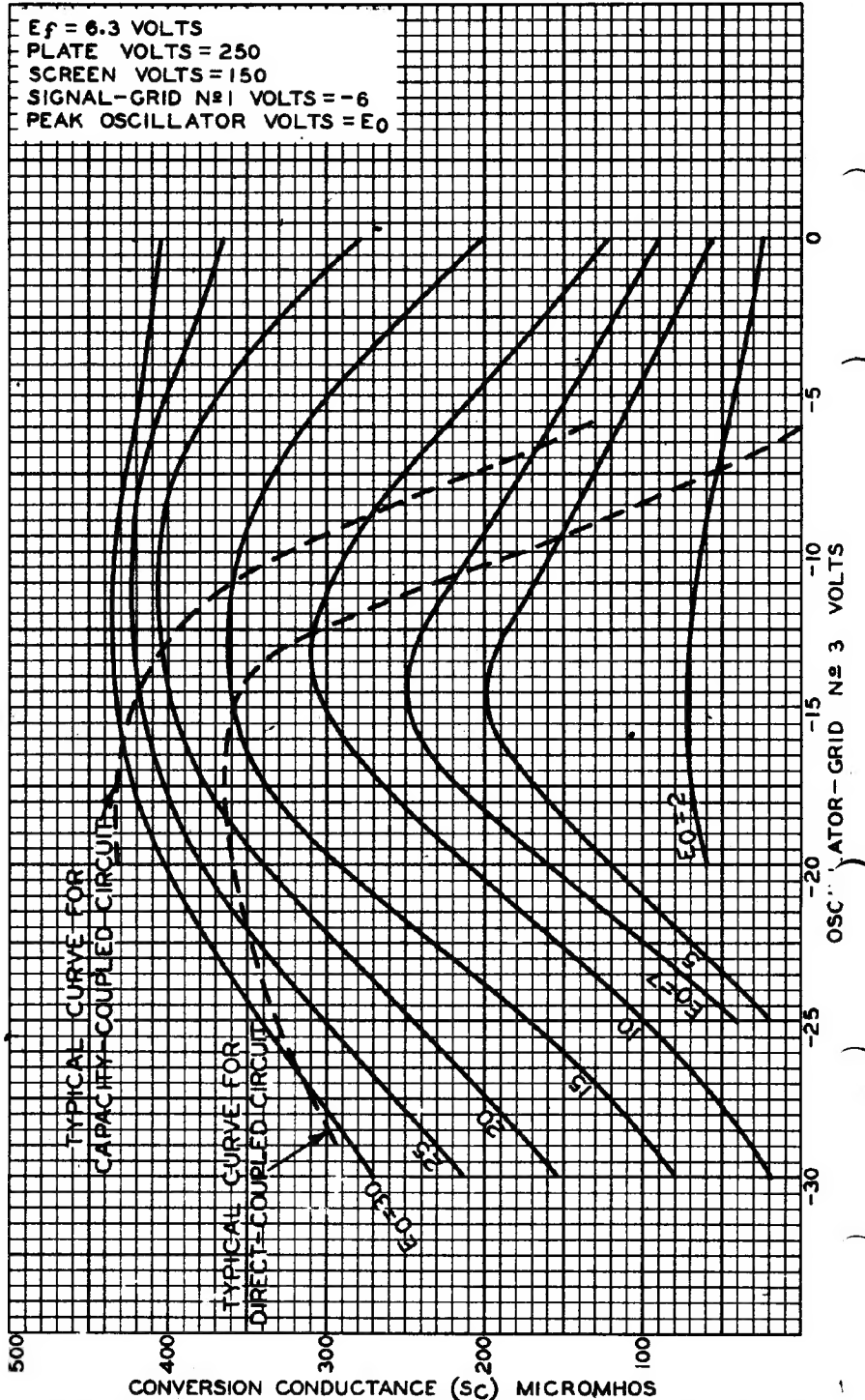
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RCA-6L7

OPERATION CHARACTERISTICS



JULY 26, 1935

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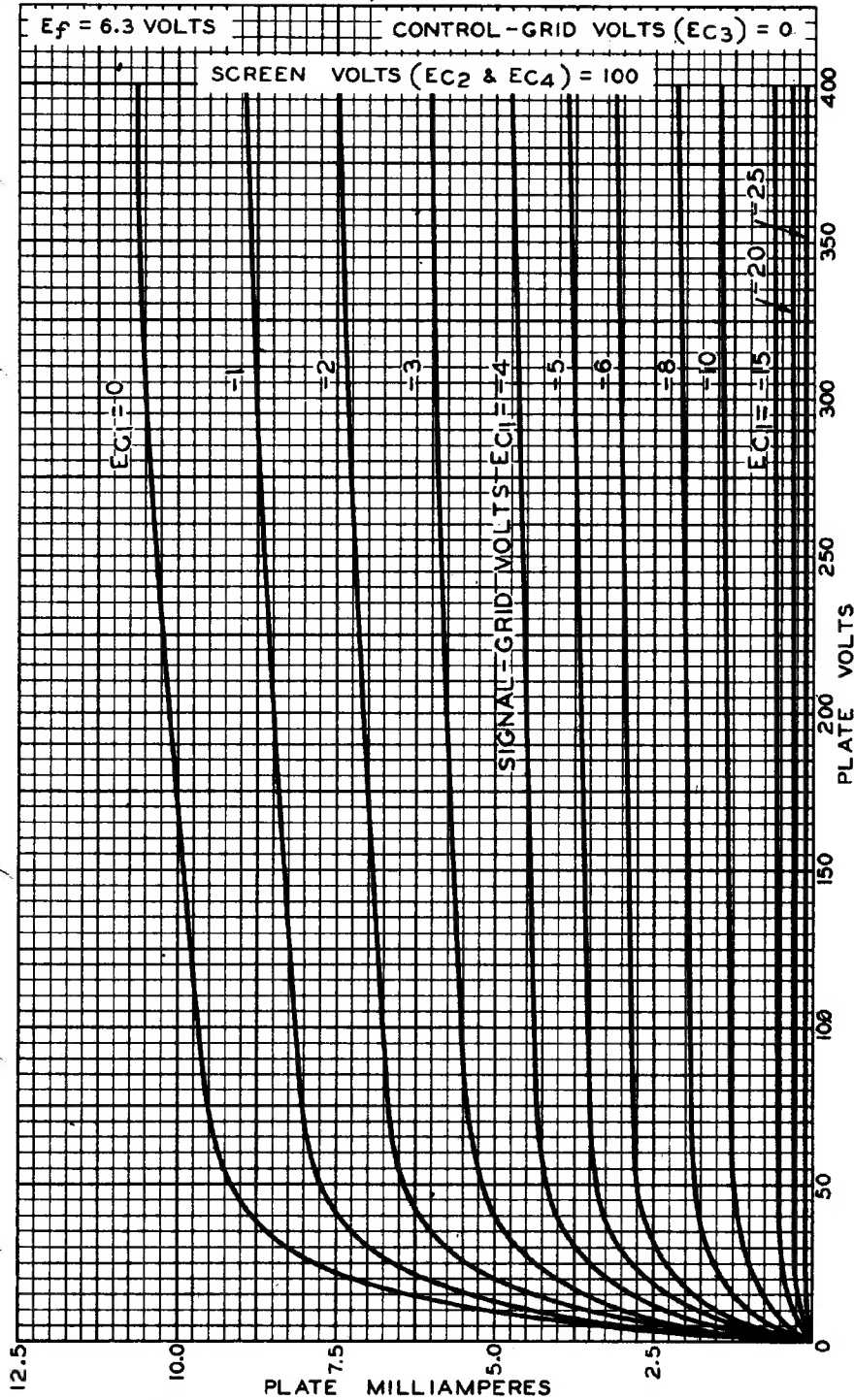
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6L7

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AVERAGE PLATE CHARACTERISTICS WITH E_{C1} AS VARIABLE



JAN. 3, 1936

RCA RADIODOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

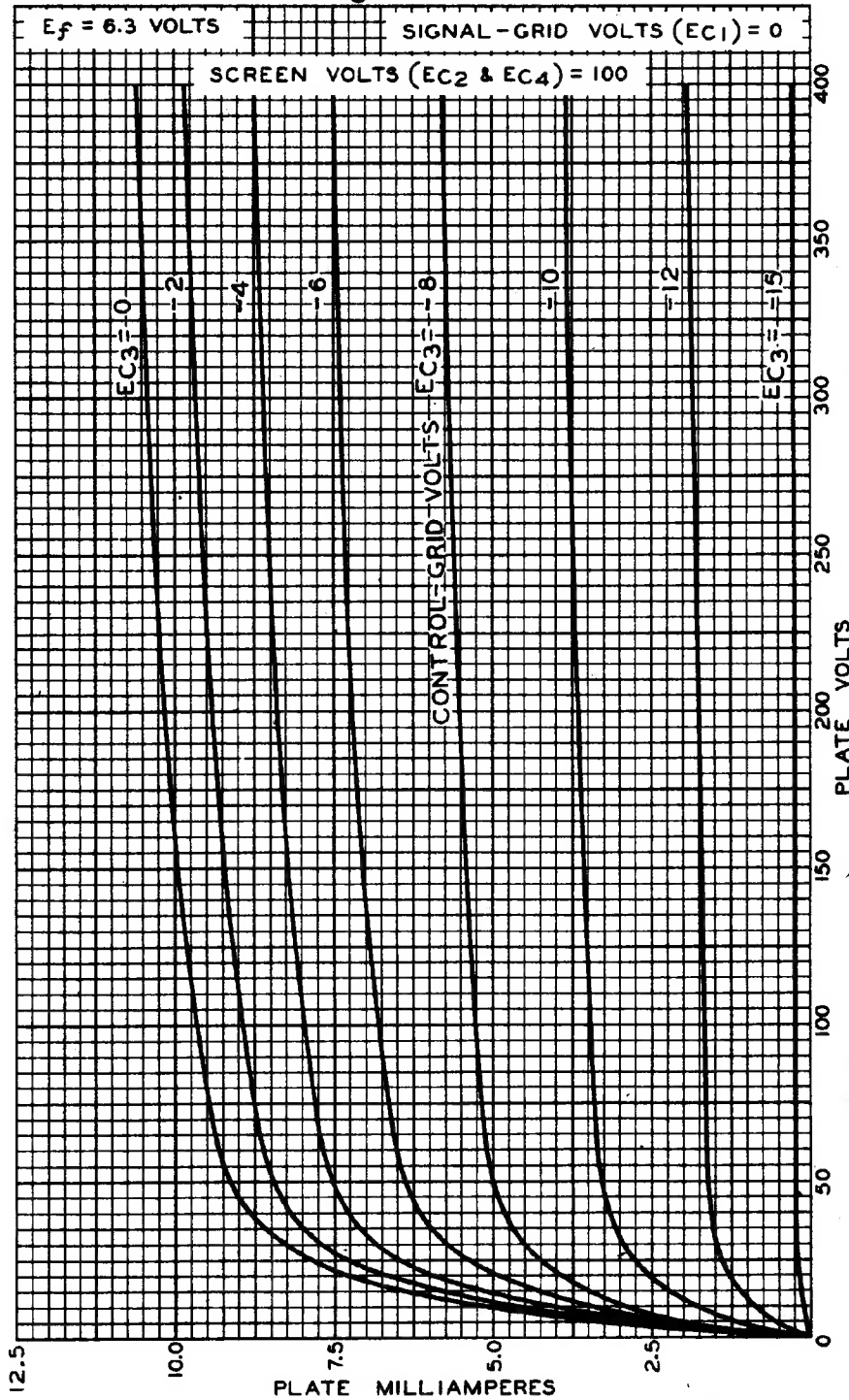
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6L7



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AVERAGE PLATE CHARACTERISTICS WITH E_{C3} AS VARIABLE



JAN. 7, 1936

RCA RADOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

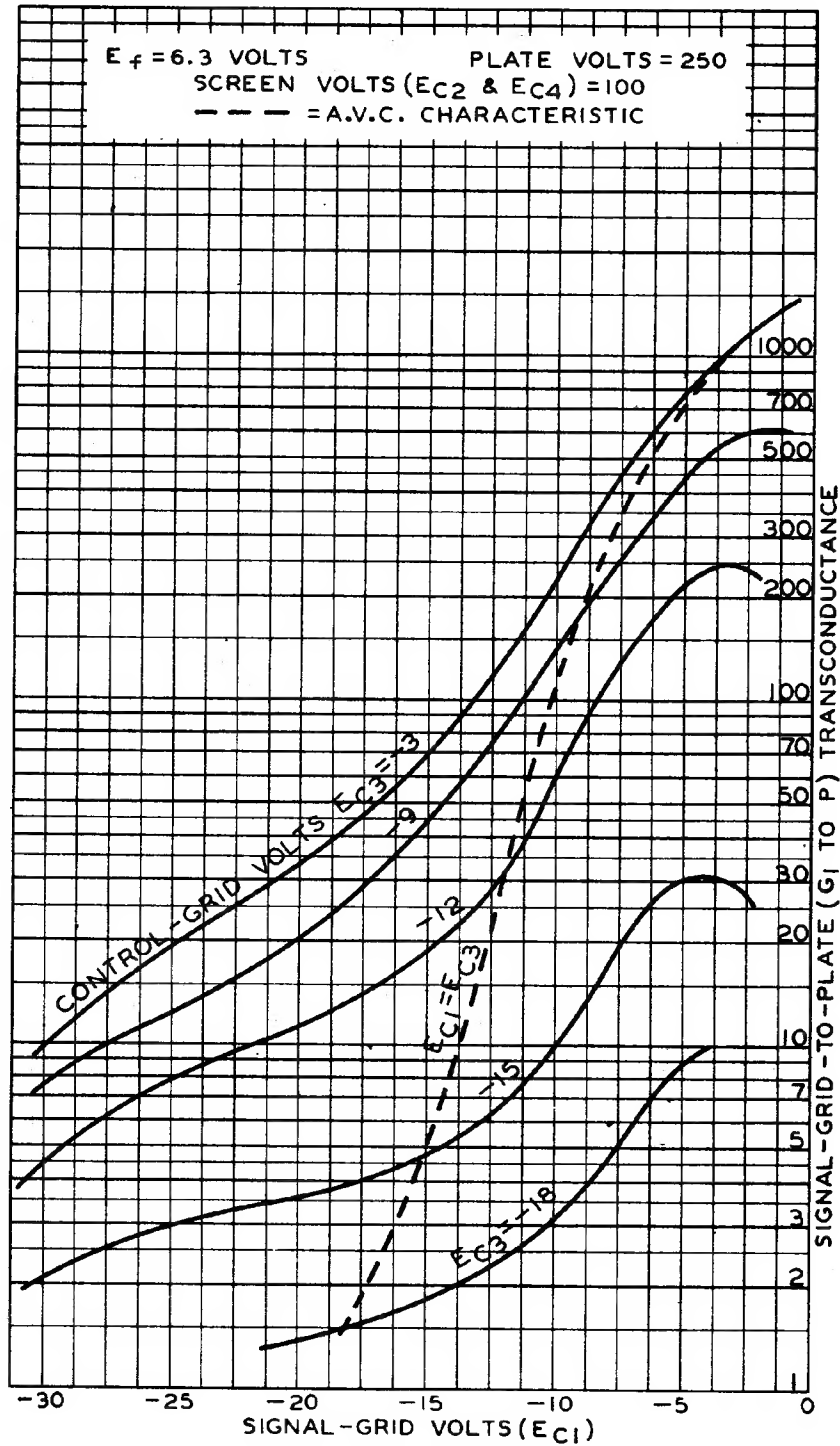
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6L7

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AVERAGE CHARACTERISTICS



JAN. 8, 1936

RCA RADOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

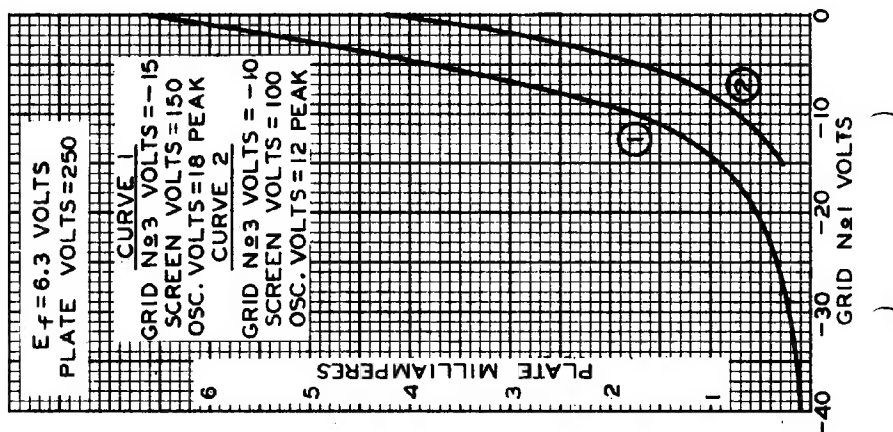
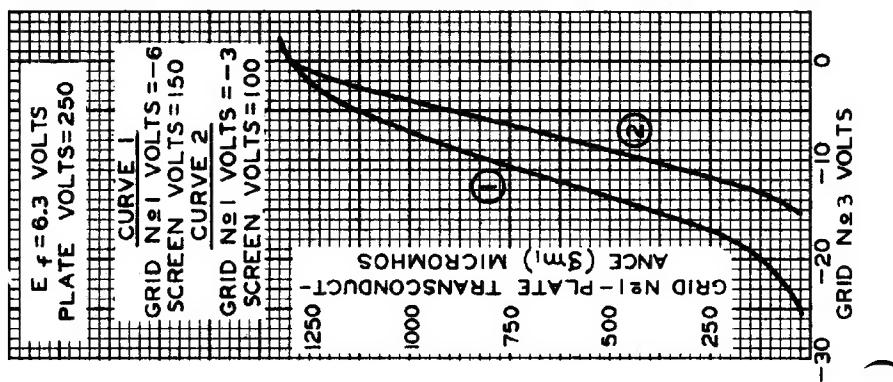
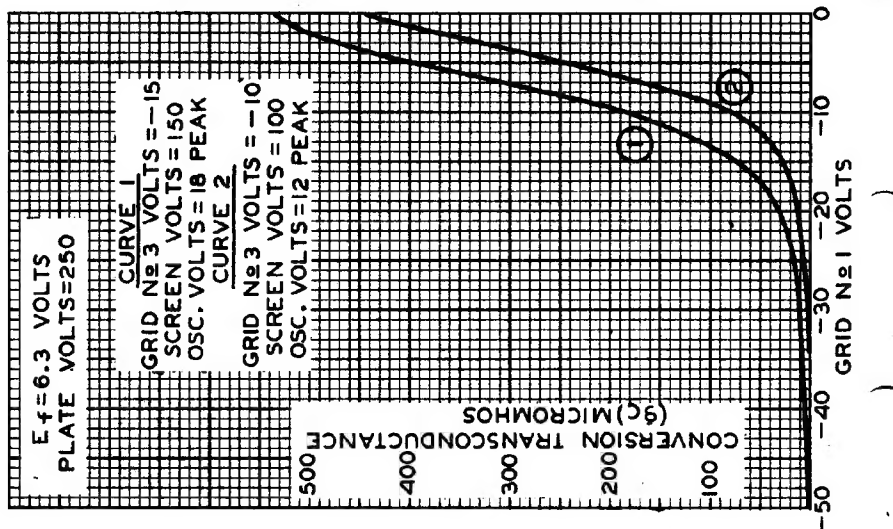
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AVERAGE CHARACTERISTICS



AUG. 5, 1935

RCA RADIOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

92C-4442